

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions of claims in this application.

1. (Currently Amended) A medical device comprising:
 - a proximal handle;
 - an elongated member having a proximal end, a distal end, and a lumen therebetween, the proximal end being coupled to the proximal handle, the elongated member being sufficiently flexible to traverse through tortuous anatomy of a patient's body;
 - ~~a tissue-cutting~~ an end effector consisting essentially of a snare loop proximate the distal end of the elongated member, actuation of the proximal handle causing the ~~end-effector~~ snare loop to sever tissue;
 - and
 - a distal member configured to open and substantially close the distal end of the lumen, the distal member defining a flow path such that, when the distal member substantially closes the distal end of the lumen, the flow path enables a flow communication between the lumen and an outside of the elongated member[[,]]

~~wherein the tissue-cutting end-effector consists essentially of a snare loop.~~
2. (Original) The device of claim 1, wherein the flow path defined by the distal member has a cross-sectional flow area less than a cross-sectional flow area of the lumen.

3. (Original) The device of claim 1, wherein the handle includes a port in fluid communication with the lumen.
4. (Original) The device of claim 3, further comprising a fluid supplying member for supplying fluid to the port.
5. (Previously Presented) The device of claim 4, wherein the port includes an interlocking member configured to engage with the fluid supplying member.
6. (Original) The device of claim 4, wherein the fluid supplying member includes a syringe.
7. (Original) The device of claim 3, wherein the handle defines a fluid chamber sealed from a portion of the handle and for providing a passage of fluid from the port to the lumen.
- 8-9. (Canceled).
10. (Previously Presented) The device of claim 1, wherein the distal member includes a sealing member to seal the lumen.

11. (Previously Presented) The device of claim 1, wherein at least a portion of the distal member has a frusto-conical shape for substantially closing the lumen.
12. (Previously Presented) The device of claim 1, wherein the distal member includes a base portion and a head portion, the base portion having an outer diameter substantially the same as an inner diameter of the lumen, the head portion having an outer diameter greater than the inner diameter of the lumen.
13. (Previously Presented) The device of claim 1, wherein the distal member includes a plate member having an outer diameter substantially the same as the inner diameter of the lumen.
14. (Original) The device of claim 1, wherein the flow path of the distal member has a varying cross-sectional flow area along the flow path.
15. (Original) The device of claim 14, wherein at least a portion of the flow path has a cross-sectional flow area smaller than that of at least one of an inlet and an outlet of the flow path.
16. (Original) The device of claim 1, wherein the distal member connects to the end effector.

17. (Original) The device of claim 16, wherein the distal member connects to the end effector at a distal end of the end effector.
18. (Original) The device of claim 17, wherein the distal member is movable relative to the lumen and is configured to substantially close the lumen when the end effector retracts proximally into the lumen and to open the lumen when the end effector extends distally out of the lumen.
19. (Withdrawn) The device of claim 1, wherein the distal member fixedly connects to the end effector at a proximal end of the end effector.
20. (Withdrawn) The device of claim 19, wherein the distal member includes a main body connected to the proximal end of the end effector and an annular flange extending from an outer surface of the main body, wherein the annular flange has an outer diameter substantially the same as the inner diameter of the elongated member.
21. (Withdrawn) The device of claim 20, wherein the flow path is formed in the annular flange.
22. (Cancelled).

23. (Withdrawn) The device of claim 1, wherein the distal member includes:
- a main body fixedly connected to a proximal end of the end effector; and
 - an annular body fixed to the distal end of the elongated member.
24. (Withdrawn) The device of claim 23, wherein the annular body includes a first portion extending internally from an inner surface of the annular body.
25. (Withdrawn) The device of claim 24, wherein the main body and the first portion are configured to contact each other to substantially close the lumen of the elongated member. ,
26. (Withdrawn) The device of claim 23, wherein the flow path has an inlet opening in a direction transverse to an axis of the annular body and an outlet opening in a direction substantially parallel to the axis of the annular body.
27. (Withdrawn) The device of claim 23, wherein the annular body has a stepped portion for securing the annular body to the elongated member.
28. (Original) The device of claim 1, wherein the handle includes a stationary part and a movable part movable relative to the stationary part.
29. (Previously Presented) The device of claim 28, wherein movement of the movable part relative to the stationary part causes the distal member to sealingly engage

the distal end of the lumen so that the lumen is in fluid communication with the outside of the elongated member via the flow path of the distal member.

30. (Previously Presented) The device of claim 29, further comprising a control member having a proximal end coupled to the movable part and a distal end coupled to the end effector so that actuation of the movable part relative to the stationary part enables movement of the end effector to sever tissue.
31. (Original) The device of claim 1, wherein the handle includes an electrical connector for receiving cautery current from a power supply source.
32. (Original) The device of claim 31, wherein the electrical connector is electrically connected to the end effector.
33. (Original) The device of claim 1, wherein the distal member defines a plurality of flow paths.
34. (Currently Amended) A medical device comprising:
 - an elongated member having a proximal end, a distal end, and a lumen therethrough, the elongated member being sufficiently flexible to traverse through a tortuous anatomy of a patient's body;

~~a tissue-cutting~~ an end effector consisting essentially of a snare loop

proximate the distal end of the elongated member, said ~~tissue-cutting~~
end effector configured to sever tissue; and

a nozzle member configured to substantially seal the distal end of the
lumen, the nozzle member defining a flow path in fluid communication
between the lumen and an outside of the elongated member when the
distal end of the lumen is sealed with the nozzle member[[,]]

~~wherein the tissue-cutting end effector consists essentially of a snare loop.~~

35. (Original) The device of claim 34, wherein the flow path has a flow area that is smaller than a flow area of the lumen.
36. (Original) The device of claim 34, further comprising a handle proximate the distal end of the elongated member and including a port.
37. (Original) The device of claim 34, wherein the nozzle member is configured to selectively seal the distal end of the lumen.
38. (Canceled).
39. (Original) The device of claim 34, wherein the nozzle member connects to the end effector.

40. (Original) The device of claim 39, wherein the nozzle member connects to the end effector at a distal end of the end effector.
41. (Withdrawn) The device of claim 39, wherein the nozzle member connects to the end effector at a proximal end of the end effector.
42. (Withdrawn) The device of claim 34, wherein the nozzle member comprises a first member fixedly connected to a proximal end of the end effector and a second member fixedly connected to a distal end of the elongated member, wherein the first and second members are configured to contact one another so as to substantially seal the distal end of the lumen.
43. (Original) The device of claim 34, further comprising a handle proximate the proximal end of the elongated member, the handle configured to control movement of the end effector and the nozzle member relative to the elongated member.
44. (Original) The device of claim 43, further comprising a control member extending between the handle and at least one of the end effector and the nozzle member.
45. (Original) The device of claim 43, wherein the handle includes a connector for receiving cautery current from a power supply source, the connector electrically connected to the end effector.

46. (Original) The device of claim 34, wherein the nozzle member defines a plurality of flow paths.

47. (Currently Amended) A method of performing a medical procedure, the method comprising:

inserting a medical device into a tissue tract of a patient, the medical device comprising a lumen and a nozzle member configured to substantially seal a distal end of the lumen, the nozzle member defining a flow path in fluid communication between the lumen and an outside of the lumen when the distal end of the lumen is sealed with the nozzle member, the medical device further comprising ~~a tissue cutting~~ an end effector consisting essentially of a snare loop coupled to the nozzle member, ~~the tissue cutting end effector consisting essentially of a snare loop~~;

closing the distal end of the lumen with the nozzle member,

spraying fluid through the flow path of the nozzle member and onto tissue of the tissue tract to enhance visualization of tissue of the tissue tract;

and

actuating the ~~tissue cutting~~ end effector of the medical device to sever the tissue of the tissue tract.

48. (Original) The method of claim 47, further comprising inserting an endoscope for viewing the tissue tract.
49. (Original) The method of claim 47, wherein the medical procedure is a colonoscopic polypectomy procedure.
50. (Original) The method of claim 47, further comprising supplying fluid to the medical device.
51. (Original) The method of claim 47, wherein spraying fluid includes spraying a chromoscopic dye agent.
52. (Original) The method of claim 47, wherein spraying fluid includes spraying a radiographic contrast agent.
53. (Original) The method of claim 47, further comprising supplying cautery current to the end effector.
- 54-55. (Cancelled).
56. (Previously Presented) The method of claim 47, wherein the nozzle member connects to the end effector.

57. (Withdrawn) The method of claim 47, wherein the nozzle member is fixedly connected to a distal end of the lumen.
58. (Original) The method of claim 47, wherein the medical procedure includes removing tissue from the tissue tract.
59. (Currently Amended) A method of performing a medical procedure, the method comprising:
- inserting a medical device into a patient, the medical device comprising:
 - an elongated member having a proximal end, a distal end, and a lumen therethrough, the distal end extending into the patient;
 - ~~a tissue-cutting~~ an end effector consisting essentially of a snare loop proximate the distal end of the elongated member, ~~the tissue-cutting end effector consisting essentially of a snare loop~~; and
 - a distal member coupled to the ~~tissue-cutting~~ end effector and configured to substantially seal the distal end of the lumen, the distal member defining a flow path in fluid communication between the lumen and an outside of the elongated member when the lumen is sealed with the distal member;
 - injecting fluid through the distal member of the medical device; and
 - actuating the ~~tissue-cutting~~ end effector to sever tissue of a tissue tract.

60. (Previously Presented) The method of claim 59, further comprising injecting fluid through the lumen of the medical device when the lumen is not sealed with the distal member.
61. (Previously Presented) The method of claim 59, wherein:
- inserting the medical device includes inserting the medical device into the tissue tract of a patient;
 - injecting fluid includes injecting a contrast agent for enhancing visualization of tissue in the tissue tract; and
 - actuating the end effector includes removing tissue from the tissue tract.
62. (Original) The method of claim 59, further comprising inserting an endoscope for viewing the tissue tract.
63. (Original) The method of claim 59, further comprising supplying fluid to the lumen of the medical device.
64. (Original) The method of claim 59, further comprising supplying cautery current to the end effector.
65. (Canceled).

66. (Original) The method of claim 59, wherein the flow path of the distal member has a flow area that is smaller than a flow area of the lumen.
67. (Original) The method of claim 59, wherein the distal member connects to the end effector.
68. (Withdrawn) The method of claim 59, wherein the distal member is fixedly connected to the distal end of the elongated member.
69. (Previously Presented) A medical device comprising:
- a proximal handle;
 - an elongated member having a proximal end, a distal end, and a lumen therebetween, the proximal end being coupled to the proximal handle, the elongated member being sufficiently flexible to traverse through tortuous anatomy of a patient's body;
 - an end effector proximate the distal end of the elongated member, actuation of the proximal handle causing the end effector to perform a medical procedure; and
 - a distal member configured to open and substantially close the distal end of the lumen, the distal member defining a flow path such that, when the distal member substantially closes the distal end of the lumen, the flow path enables a flow communication between the lumen and an outside of the elongated member,

wherein at least a portion of the flow path has a cross-sectional flow area smaller than both a cross-sectional flow area of an inlet of the flow path and a cross-sectional flow area of an outlet of the flow path.

70. (Previously Presented) The device of claim 69, wherein the handle includes a port in fluid communication with the lumen.
71. (Previously Presented) The device of claim 69, wherein the end effector comprises a tissue cutting end effector.
72. (Previously Presented) The device of claim 69, wherein the distal member includes a base portion and a head portion, the base portion having an outer diameter substantially the same as an inner diameter of the lumen, the head portion having an outer diameter greater than the inner diameter of the lumen.
73. (Previously Presented) The device of claim 69, wherein the distal member includes a plate member having an outer diameter substantially the same as the inner diameter of the lumen.
74. (Previously Presented) The device of claim 69, wherein the distal member connects to the end effector at a distal end of the end effector.

75. (Previously Presented) The device of claim 74, wherein the distal member is movable relative to the lumen and is configured to substantially close the lumen when the end effector retracts proximally into the lumen and to open the lumen when the end effector extends distally out of the lumen.
76. (Withdrawn) The device of claim 69, wherein the distal member connects to the end effector at a proximal end of the end effector.
77. (Withdrawn) The device of claim 76, wherein the distal member includes a main body connected to the proximal end of the end effector and an annular flange extending from an outer surface of the main body, wherein the annular flange has an outer diameter substantially the same as the inner diameter of the elongated member.
78. (Withdrawn) The device of claim 69, wherein the distal member includes a main body connected to a proximal end of the end effector and an annular body fixed to the distal end of the elongated member.
79. (Withdrawn) The device of claim 78, wherein the annular body includes a first portion extending internally from an inner surface of the annular body and being configured to contact a portion of the main body to substantially close the lumen of the elongated member.

80. (Withdrawn) The device of claim 78, wherein the flow path has an inlet opening in a direction transverse to an axis of the annular body and an outlet opening in a direction substantially parallel to the axis of the annular body.
81. (Previously Presented) The device of claim 69, wherein the handle includes an electrical connector for receiving cautery current from a power supply source.
82. (Previously Presented) The device of claim 69, wherein the distal member defines a plurality of flow paths.
83. (Withdrawn) The device of claim 1, wherein the distal member comprises:
a main body connected to a proximal end of the end effector; and
an annular body fixed to the distal end of the elongated member, and
wherein the main body and the annular body are configured to contact each other to substantially close the distal end of the lumen.
84. (Withdrawn) The device of claim 83, wherein the annular body includes a first portion extending internally from an inner surface of the annular body.
85. (Withdrawn) The device of claim 84, wherein the main body and the first portion are configured to contact each other to substantially close the lumen of the elongated member.

86. (Withdrawn) The device of claim 83, wherein the flow path has an inlet opening in a direction transverse to an axis of the annular body and an outlet opening in a direction substantially parallel to the axis of the annular body.

87. (Previously Presented) A medical device comprising:

a proximal handle;

an elongated member having a proximal end, a distal end, and a lumen therebetween, the proximal end being coupled to the proximal handle, the elongated member being sufficiently flexible to traverse through tortuous anatomy of a patient's body;

an end effector proximate the distal end of the elongated member, actuation of the proximal handle causing the end effector to perform a medical procedure; and

a distal member configured to open and substantially close the distal end of the lumen, the distal member defining a flow path such that, when the distal member substantially closes the distal end of the lumen, the flow path enables a flow communication between the lumen and an outside of the elongated member,

wherein the flow path comprises an inlet and a plurality of outlets connecting to the inlet.

88. (Previously Presented) The device of claim 87, wherein the end effector comprises a tissue cutting end effector.

89. (Previously Presented) The method of claim 47, wherein at least a portion of the flow path in the nozzle member has a cross-sectional flow area smaller than both a cross-sectional flow area of an inlet of the flow path and a cross-sectional flow area of an outlet of the flow path.
90. (Withdrawn - Currently Amended) The method of claim 47, wherein the nozzle member is fixedly connected to a proximal end of the ~~lumen~~ end effector.
91. (Withdrawn) The method of claim 47, wherein the nozzle member includes a main body connected to a proximal end of the end effector and an annular body fixed to the distal end of the lumen.
92. (Withdrawn) The method of claim 91, wherein the annular body includes a first portion extending internally from an inner surface of the annular body and being configured to contact a portion of the main body to substantially close the lumen of the elongated member.
93. (Previously Presented) The method of claim 59, wherein at least a portion of the flow path has a cross-sectional flow area smaller than both a cross-sectional flow area of an inlet of the flow path and a cross-sectional flow area of an outlet of the flow path.

94. (Withdrawn) The method of claim 59, wherein the distal member is fixedly connected to a proximal end of the lumen.
95. (Withdrawn) The method of claim 59, wherein the distal member includes a main body connected to a proximal end of the end effector and an annular body fixed to the distal end of the elongated member.
96. (Withdrawn) The method of claim 95, wherein the annular body includes a first portion extending internally from an inner surface of the annular body and being configured to contact a portion of the main body to substantially close the lumen of the elongated member.
97. (Currently Amended) The device of claim 1, wherein the ~~tissue-cutting~~ end effector consists of a snare loop.
98. (Currently Amended) The device of claim 34, wherein the ~~tissue-cutting~~ end effector consists of a snare loop.
99. (Currently Amended) The method of claim 47, wherein the ~~tissue-cutting~~ end effector consists of a snare loop.
100. (Currently Amended) The method of claim 59, wherein the ~~tissue-cutting~~ end effector consists of a snare loop.

101. (Currently Amended) The device of claim 71, wherein the ~~tissue-cutting~~ end effector consists essentially of a snare loop.

102. (Currently Amended) The device of claim 88, wherein the ~~tissue-cutting~~ end effector consists essentially of a snare loop.